AMSAT News Service Weekly Bulletins
Issue: ANS-200
Date: 1992-07-18
Sources: amsat-ans-1992-ans-200-weekly.txt

SB SAT @ AMSAT $ANS-200.01
STS-47 INFORMATION: PART I

HR AMSAT NEWS SERVICE BULLETIN 200.01 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992 BID:$ANS-200.01
TO ALL RADIO AMATEURS BT

N5QWL Provides STS-47/SAREX Information: Part I

Shuttle Amateur Radio Experiment (SAREX) Fact Sheet

STS-47 Space Shuttle Endeavour

When: Mid-September, 1992 for 6 days of 2M Operations.

Where: Earth Orbit. Altitude 300 KM, with radio coverage of latitudes from 70 degrees North to 70 degrees South.

Operators: Dr. Jay Apt N5QWL and Dr. Mamoru Mohri 7L2NJY.
N5QWL is the flight engineer for STS-47 and will operate the shuttle systems during the "night" shift, while 7L2NJY will be one of the scientists performing experiments in a laboratory in the shuttle's cargo bay during the "day" shift.

Modes: FM Voice
VOICE CALL SIGNS: N5QWL and 7L2NJY

Packet (Beacons giving daily mission activities by N5QWL daily if he gets a chance, and robot QSOs - successful connects will be issued a contact number by the robot)
PACKET CALL SIGN: W5RRR-1

Frequencies: We will operate split. PLEASE DO NOT TRANSMIT ON THE DOWNLINK FREQUENCY!

VOICE: Downlink (shuttle transmits) on 145.55 MHz
Uplink (ground transmits) on 144.95, 144.91, 144.97 MHz (except over Europe) - we'll listen on those 3 frequencies to spread out the pileup a bit.
Uplink for Europe only: 144.80, 144.75, 144.70 MHz

Successful QSOs on voice will be facilitated by using standard international phonetics for your call sign. We will not answer any stations using non-standard phonetics. Use your entire call sign - we log with an audio tape recorder. Do not use our call sign - passes are very short, and we want to work as many folks as possible.

[The AMSAT News Service (ANS) would like to thank N5QWL for this bulletin item. Please stay tunned for more more STS-47 SAREX information from the ANS.]

/EX
SB SAT @ AMSAT $ANS-200.02
STS-47 INFORMATION: PART II

HR AMSAT NEWS SERVICE BULLETIN 200.02 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992 BID:$ANS-200.02
TO ALL RADIO AMATEURS BT

N5QWL Provides STS-47/SAREX Information: Part II

PACKET: Downlink (shuttle transmits) on 145.55
Uplink (ground transmits) on 144.70 (worldwide)

If you can, decrease your radio's deviation to 3 KHz (most are initially set at 5 KHz) and compensate for the Doppler shift. If you cannot, wait until a minute or 90 seconds after we come over your horizon to transmit - that will put you within our IF. If a station transmits without following these suggestions, we just hear what sounds like a noisy carrier. The above applies to both voice and packet.

QSL via: N5QWL, 806 Shorewood Drive, Seabrook, Texas 77586 USA

Include a self-addressed stamped envelope (SASE).

Non-US stations include a self addressed envelope with $0.50 of US postage affixed or appropriate IRCs.

Include the Callsign worked, Date, UTC, Mode, and Frequency. For packet contacts, include the QSO number issued by the robot.

SWL QSL's: Include the Callsign heard, Date, UTC, Mode, and Frequency.

Information Sources During The Mission:

AMSAT News Service (ANS) bulletins, Compuserve, Genie, Prodigy, local packet bulletin boards, ARRL bulletins, and HF voice from NASA Johnson Space Center ARC, Houston, Texas, W5RRR, or NASA Goddard Spaceflight Center ARC, Greenbelt, Maryland, WA3NAN, frequencies listed below.

W5RRR may be found on or near: 7.215, 14.280, 21.360, and 28.400 MHz. WA3NAN retransmits NASA Select Audio and SAREX bulletins simultaneously on or near 3.860, 7.185, 14.295, 21.395, and 28.650 MHz.

The NASA Info BBS at Johnson Space Center, Houston, will also carry Keplerian elements and SAREX bulletins. (713) 483-2500, 1200 baud, 8-N-1. At the ENTER NUMBER: prompt, type 62511 <return and log onto the BBS. The Keps and bulletins will be in the welcome message. Disconnect rapidly to facilitate access by others.

[The AMSAT News Service (ANS) would like to thank N5QWL for this bulletin item. Please stay tunned for more more STS-47 SAREX information from the ANS.]

/EX
SB SAT @ AMSAT $ANS-200.03
STS-47 INFORMATION: PART III

HR AMSAT NEWS SERVICE BULLETIN 200.03 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992 BID:$ANS-200.03
TO ALL RADIO AMATEURS BT

N5QWL Provides STS-47/SAREX Information: Part III

Operations Notes:

N5QWL will be asleep over most USA passes, and 7L2NJY will be busy with laboratory duties for most US passes, so try us on packet over the USA. Remember, our packet call sign is W5RRR-1. We'll try to work voice (1) when we are not otherwise engaged, and (2) at night or when the ground is cloudy (we are generally busy taking pictures of the Earth during clear daylight passes). Our orbit will carry us over the Northern hemisphere in daylight.

We plan to work 6 schools on this mission: 2 in the US, 3 in Australia, and 1 in Europe or Africa.

We do not plan any orbiter maneuvers after the first 6 hours of the flight, so orbital elements obtained early in the flight ought to be pretty good for the entire flight. If I can get to it, I'll activate the SAREX about 3 hours into the mission; deactivation will occur at about 6 days, 8 hours after launch.

The orbiter attitude is planned to be tail down, payload bay south. The SAREX antenna will be in the right forward window, so most contacts should have a good antenna pattern from AOS to TCA (time of closest approach).

Pre-launch Keplerian Elements (Courtesy of Gil Carman of the JSC ARC):

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STS-47
1 00047U          92255.65952351  .00092000  00000-0  29200-3 0    44
2 00047  57.0019 106.3148 0009301 264.7374  95.2615 15.90241453    28

Satellite: STS-47
Catalog number: 00047
Epoch time:      92255.65952351 =====>(11 SEP 92   15:49:42.83 UTC)
Element set:     JSC-004
Inclination:       57.0019 deg
RA of node:       106.3148 deg          Space Shuttle Flight STS-47
Eccentricity:     .0009301           Pre-launch SGP4 Keplerian Elements
Arg of perigee:   264.7374 deg        Launch:  11 SEP 92  14:23:00 UTC
Mean anomaly:      95.2615 deg
Mean motion:   15.90241453 rev/day                 W5RRR
Decay rate:     9.2000e-04 rev/day*2      NASA Johnson Space Center
Epoch rev:               2
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[The AMSAT News Service (ANS) would like to thank N5QWL for this bulletin item. Please stay tunned for more STS-47/SAREX information from the ANS.]

/EX
SB SAT @ AMSAT $ANS-200.04
AO-13 OPERATIONS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 200.04 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992 BID: $ANS-200.04
TO ALL RADIO AMATEURS BT

AMSAT-NA AO-13 Operations Net Schedule

AMSAT Operations Nets are planned for the following times. Mode B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz and Mode J/L on a downlink of 435.970 MHz.

Date	UTC	Mode	Phs	NCS	Alt

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 1-Aug-92*      1500   B         57     VE2LVC  W9ODI
 8-Aug-92*      1900   B         65     W7NQM   W5IU
15-Aug-92       1300   B        105     WB6LLO  W9ODI

* Thanks to W9ODI for the off-pointing alert and subsequent change.

Guest commentators are planned.  Join the Net if you have questions.  In
the unlikely event that either the Net Control Station (NCS) or the
alternate NCS does not call on frequency, any participant is invited to act
as the NCS.

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Slow Scan Television On A0-13

The SSTV net will meet on a downlink frequency of 145.925 MHz, Mode B at
MA 165, UTC Sundays.  Also try Mode J, UTC Saturdays at MA 165, on a
downlink frequency of 435.980 MHz.  Try the various AMSAT Nets for
scheduling at other times.

/EX
SB SAT @ AMSAT   $ANS-200.05
FO-20 MODE JA TRANSPONDER SCHED

HR AMSAT NEWS SERVICE BULLETIN 200.05 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992       BID: $ANS-200.05
TO ALL RADIO AMATEURS BT

FO-20 Mode JA Transponder Schedule

22-Jul-92 01:40 UTC until 23-Jul-92 01:55 UTC

           FO-20 Mode JA Transponder Frequencies

Telemetry Beacon    435.795 MHz (CW)
Mode JA Uplink      145.900 - 146.000 MHz (SSB, CW)
Mode JA Downlink    435.800 - 435.900 MHz (SSB, CW, Inverting)

/EX
SB SAT @ AMSAT   $ANS-200.06
SUMMER AO-13 TRANSPONDER SCHED

HR AMSAT NEWS SERVICE BULLETIN 200.06 FROM AMSAT HQ
SILVER SPRING, MD JULY 18, 1992       BID: $ANS-200.06
TO ALL RADIO AMATEURS BT

AO-13 Late Summer Schedule Announced

The current schedule for AO-13 is as follows:

N QST 1992 May 08  AO-13 Transponder Schedule  Jun 10 - Jul 20
Mode-B  : MA 000 to MA 165 !  Mode-JL on Mon, Wed   !
Mode-JL : MA 165 to MA 200 !  Fri and Sat UTC only. ! Alon/Alat
Mode-LS : MA 200 to MA 215 !  S Beacon on "L" days  !  210/1
Mode-B  : MA 215 to MA 256 !  S Transp on "B" days  +----------/
Omnis   : MA 250 to MA 060 !  Mode L OFF after Jun 29 until
Aug 17. Next attitude change Jul 20, to 150/0 until Sep 21.
    73 de Peter DB2OS, James G3RUH and Graham VK5AGR.


--->PLEASE NOTE THAT AO-13 IS IN CONTINUOUS MODE B UNTIL AUGUST 17TH<---

      AO-13 Transponder Schedule 1992 Aug 17 - Sep 21
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 Mode-B  : MA   0 to MA  40 !  from 1992 Aug 17 until Sep 21
 Mode-S  : MA  40 to MA  50 !<- S transponder; B trsp. is OFF!
 Mode-LS : MA  50 to MA  55 !<- S beacon + L transponder
 Mode-JL : MA  55 to MA  70 !   This schedule operates
 Mode-B  : MA  70 to MA 256 !   every orbit, every day.
 Omnis   : MA 160 to MA  10 !     Alon/Alat 150/0
 Please DON'T uplink to Mode B MA during 40-50; it interferes with Mode S.
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      Calendar Of Events For AO-13 To The End Of 1992
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                                                          Suns Position
 Date               Event            Modes   Sun Angle    SEL/SAZ
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 1992 Jul 20 [Mon] Move to 150/0   B  --  -    43 to 44    -34/176
 1992 Aug 17 [Mon] JLS ON          B  JL  S    28          -26/208
 1992 Sep 21 [Mon] Move to 180/0   B  JL  S    -1 to 29     -2/241
 1992 Nov 23 [Mon] Move to 210/0   B  JL  S   -29 to -4     33/305
 1992 Dec 14 [Mon] JLS OFF         B  --  -   -27           33/333
 1992 Dec 28 [Mon]  t.b.a.                     43           29/351
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AO-10 is currently available for Mode B operation when it is view of your
QTH.  PLEASE DO NOT attempt to use AO-10 if you hear the beacon or the
transponder signals FMing.

/EX
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